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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/644,484	08/20/2003	Trung V. Le	10383US01	7391

7590 07/25/2005

Attention: Eric D. Levinson
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EXAMINER

NGUYEN, HUNG THANH

ART UNIT	PAPER NUMBER
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2841

DATE MAILED: 07/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/644,484

Applicant(s)

LE, TRUNG V.

Examiner

HUNG T. NGUYEN

Art Unit

2841

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) 21 and 22 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 and 23-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

Restriction to one of the following inventions is required under 35 U.S.C. 121:

I. Claim 1-20 and 23-26, drawn to memory card with multiple connectors classified in class 365 subclass 51.

II. Claim 21-22, drawn to method of manufacturing, classified in class 29, subclass

831The inventions are distinct, each from the other because of the following reasons:

Inventions 2 and 1 are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case method is used power to trigger the controller to access to the memory base.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

During a telephone conversation with Eric D. Levinson on 7/6/2005 a provisional election was made with traverse to prosecute the invention of group I, claim 1-20 and 23-26. Affirmation of this election must be made by applicant in replying to this Office action. Claim 21-22 withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) The invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 1, 4, 5, 8, 9, 16, 19, 20, 23, 26 rejected under 35 U.S.C. 102(b) as being anticipated by Lee (US 5748912).

Regard claim 1 and 23: Lee discloses figure (4A-4C) a first connector (A01-A54) electrically coupled to the memory (401A) and conforming to a first connector (A01-A54) standard; and a second connector (T01-T17) electrically coupled to the memory (401A) and conforming to a second connector (T01-T17) standard.

Regard claim 4: Lee discloses in figure (4A-4C) the memory card (explain in claim 1) wherein the first (A01-A54) and second connector (B01-B54) standards comprise first (A01-A54) and second (B01-B54) host computer connector (HCC) standards.

Regard claim 5, 26: Lee discloses in figure (4A-4C) the memory card wherein the first (explain in claim 1) and second (explain in claim 1) HCC standards comprise standards selected from a group consisting of: a personal computer memory card international association (PCMCIA) standard (Lee has specified at least one of his connector capable to connect to at least one of the member of HCC's group, see column 5-10 in spec.), PC Card standard (explain above), a CardBus standard (explain above), a Universal Serial

Bus (USB) standard (explain above), a Universal Serial Bus 2 (USBZ) standard (explain above), an IEEE 1394 FireWire standard (explain above), a Small Computer System interface (SCSI) standard (explain above), an Advance Technology Attachment (ATA) standard (explain above), a serial ATA standard (explain above), a Peripheral Component Interconnect (PCI) standard (explain above), and a conventional serial or parallel standard (explain above).

Regard claim 8: Lee discloses in figure (4A-4C) the memory card wherein the first connector (explain in claim 1) is disposed on a different side of the memory card (explain in claim 1) than the second connector (explain in claim 1).

Regard claim 9: Lee discloses in figure (4A-4C) the memory card of wherein the first (explain in claim 1) connector is disposed on an opposite side of the memory card (explain in claim 1) relative to the second (explain in claim 1) connector.

Regard claim 16: Lee discloses in figure (4A-4C) the memory card wherein the first controller (403) comprises a memory controller (internal of 403) integrated with a first connector controller (A01-A54) conforming to the first connector (A01-A54) standard.

Regard claim 19: Lee discloses in figure (4A-4C) the memory further comprising a third connector (420) electrically coupled to the memory (404) and conforming to a third connector (420) standard.

Regard claim 20: Lee discloses in figure (4A-4C) the memory card of further comprising a fourth connector (408) electrically coupled to the memory (404) and conforming to a fourth connector (408) standard.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 2, 3, 24, 6, 7, 10, 11, 12, 13, 14, 15, 17, 18, 26 rejected under 35 U.S.C. 103(a) as being unpatentable over Lee (US 5748912) in view of Jones et al. (US 6438638) and Jones et al. (US 6006295).

Regard claim 2: Lee discloses all elements of memory card as described above with respect to claim 1, except Lee does not disclose first and second device communication connector (DCC) standards.

Jones et al. discloses first and second device communication connector (DCC) standard.

Lee and Jones et al. are analogous art because they are from the same field of endeavor to make memory card.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art, to make card over Lee such that the card is included device communication connector (DCC) standard.

Therefore, it would have been obvious to combine Lee and Jones et al. for the benefit of being able to communicate with hand held devices.

Art Unit: 2841

Regard claim 3, 24: Jones et al. discloses in figure (3A-3B) the memory card wherein the first (explain in claim 2) and second (explain in claim 2) DCC standards comprise standards selected from a group consisting of: a Compact Flash standard (16), a Smart Media standard (24), a Multimedia Card standard (28), a Secure Digital standard (26), a Memory Stick standard (18), and an xD standard (other like).

Regard claim 6: Lee discloses all elements of the memory card as described above with respect to claim 1, the memory card (explain in claim 1) wherein the first connector (explain in claim 1) standard comprises a host computer connector (HCC) standard except, Lee does not discloses the second (explain in claim 2) connector standard comprises a device communication connector (DCC) standard.

Jones et al. disclose in figure (3A-3B) the second connector standard (explain in claim 2) comprises a device communication connector (DCC) standard.

Lee and Jones et al. are analogous art because they are from the same field of endeavor to make memory.

At the time of the invention it would have been obvious to a person of ordinary skill in the art, to make a memory card of Lee such that contain DCC connector as taught by Jones et al.

The suggestion or motivation for doing so would have been obvious in view of the teaching of Jones et al. to have multi-connection with different devices.

Regard claim 7, 26: Lee discloses all elements of the memory card as described above with respect to claim 1 and 6 wherein the HCC comprises a standard selected from a group consisting of: a personal computer memory card international association

Art Unit: 2841

(PCMCIA) standard (explain in claim 5), a PC Card standard (explain in claim 5), a CardBus standard (explain in claim 5), a Universal Serial Bus (USB) standard (explain in claim 5), a Universal Serial Bus 2 (USB2) standard (explain in claim 5), an IEEE 1394 FireWire standard (explain in claim 5), a Small Computer System Interface (SCSI) standard (explain in claim 5), an Advance Technology Attachment (ATA) standard (explain in claim 5), a serial ATA standard (explain in claim 5), a Peripheral Component Interconnect (PCI) standard (explain in claim 5), and a conventional serial or parallel standard (explain in claim 5) except, Lee does not disclose the DCC comprises a standard selected from a group consisting of: a Compact Flash standard, a Smart Media standard, a MultiMedia Card standard, a Secure Digital standard, a Memory Stick standard, and an xD standard.

Jones et al. discloses disclose the DCC comprises a standard selected from a group consisting of: a Compact Flash standard (explain in claim 3), a Smart Media standard (explain in claim 3), a Multimedia Card standard (explain in claim 3), a Secure Digital standard (explain in claim 3), a Memory Stick standard (explain in claim 3), and an xD standard (explain in claim 3).

Lee and Jones et al. are analogous art because they are from the same field of endeavor to make memory cards.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art, to have several types of memories of Lee such that included memories as taught by Jones et al.

Therefore, it would have been obvious to combine Lee and Jones et al. for the benefit of having multiconnectors.

Regard claim 10: Lee discloses all elements of memory card as described above with respect to claim 1, except Lee does not disclose at least one of the first connector (end portion of 18 with teeth) and the second connector (end portion of 34 with teeth) comprises a retractable connector (portion between 34 and 18).

Jones et al. discloses a retractable connector.

Lee and Jones et al. are analogous art because they are from the same field of endeavor to make electronic devices.

At the time of invention, it would have been obvious to a person of ordinary skill in the art, to make the connector of Lee such that the connector is included retractable connector as taught by Jones et al.

Therefore, it would have been obvious to combine Lee with Jones et al. for the benefit of being connected to various external peripherals.

Regard claim 11: Jones et al. discloses in figure (3A-3B) the memory card (18) further comprising: a housing (a U or C shape end of 34) defining a slot for the retractable connector and a first electrical contact (end portion with teeth 18) on the retractable connector and a second electrical contact (a U or C shape end of 34) within the slot, wherein the first electrical contact (end portion with teeth 18) couples to the second electrical contact (end portion with teeth 34) when the retractable connector is extended from the slot.

Regard claim 12: Jones et al. discloses in figure (3A-3B) the memory card (18) wherein the first connector (end portion of 18 with teeth) is disposed on the same side of the memory card (18) as the second connector (end portion of 34 with teeth).

Regard claim 13: Jones et al. discloses the memory card wherein a set of electrical contact elements (the contact pads of 34 and 18) of the first connector (end portion of 18 with teeth) comprise a subset of a set of electrical contact elements (the contact pads of 34 and 18) of the second connector (end portion of 34 with teeth).

Regard claim 14: Lee discloses in figure (4A-4B) the memory card further comprising: a memory controller (403) electrically coupled to the memory (404); a first connector controller (410) electrically coupled to the first connector (A01-A54) and the memory controller (403), the first connector controller (403) conforming to the first connector (A01-A54) standard except, Lee does not disclose a second connector controller electrically coupled to the second connector (end portion of 34 with teeth) and the memory controller (40), the second connector controller (the connector which connect controller 40 to second connector 34) conforming to the second connector (end portion of 34 with teeth) standard, wherein the first connector (A01-A54) is electrically coupled to the memory through the first connector controller (A01-a54) and the memory controller (403), and the second connector (end portion of 34 with teeth) is electrically coupled to the memory through the second connector controller (the connector which connect controller 40 to second connector 34) and the memory controller (internal part of 40).

Art Unit: 2841

Jones et al. discloses in figure (3A-3B) a second connector controller (40) electrically coupled to the second connector (end portion of 34 with teeth) and the memory controller (40), the second connector controller (the connector which connect controller 40 to second connector 34) conforming to the second connector (end portion of 34 with teeth) standard, wherein the first connector (A01-A54) is electrically coupled to the memory (404) through the first connector controller (403) and the memory controller (403), and the second connector (end of portion 34 with teeth) is electrically coupled to the memory through the second connector controller (connector which connect controller 40 to second connector 34) and the memory controller (internal part of 40).

Lee and Jones et al. are analogous art because they are from the same field of endeavor to make memories card.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art, to make the memory card of Lee such that to include the memory controller as taught by Jones et al.

Therefore it would have been obvious to combine Lee and Jones et al. for the benefit of having multiconnetion between computer and personal devices.

Regard claim 15: Lee and Jones et al. disclose in figure (4A-4C) and (3A-3B) the memory card further comprising: a first controller (403) electrically coupled to the memory (404) and the first connector (A01-A54), the first controller (403) controlling the memory (404) and output via the first connector (A01-A54), and a second connector controller (connector which connect the controller of 40 with the end portion of 34 with teeth) electrically coupled to the second connector (end portion of 34 with teeth) and the

Art Unit: 2841

first controller (403), the second connector controller (40) controlling output via the second connector (end portion of 34 with teeth) and conforming to the second connector (end portion of 34 with teeth) standard, wherein the first connector (A01-A54) is electrically coupled to the memory (404) through the first controller (403), and the second connector (end portion of 34 with teeth) is electrically coupled to the memory (internal of 18) through the second connector controller (connector which connect the controller 40 with end portion of 34 with teeth) and the first controller (403).

Regard claim 17: Lee and Jones et al. disclose in figure (4A-4C) and (3A-3B) the memory card further comprising a controller (403) that controls the memory (404) and output via the first connector (A01-A54) and the second connector (end portion of 34 with teeth), wherein the first (A01-A54) and second connectors (end portion of 34 with teeth) are electrically coupled to the memory (404) through the controller (403).

Regard claim 18: Lee and Jones et al disclose in figure (4A-4C) and (3A-3B) the memory card wherein the controller (403) comprises a memory controller (internal memory of 403) integrated with a first connector controller (410) conforming to the first connector (A01-A54) standard and a second connector controller (connector which connect the controller 40 with the teeth of 34) conforming to the second connector (end portion of 34 with teeth) standard.

Relevant Art

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The Le (US 6890188) teaches the memory card compatible with device connector and host connector standards, Le (US 6908038) teaches the multi-connector memory card with retractable sheath to protect the connectors, Dell et al. (US

Art Unit: 2841

6111757) teaches SIMM/DIMM memory modules, Chin et al. (US 4647123) teaches the Bus Networks for Digital data processing system, Sharp et al. (US 4885482) teaches Multiple Computer Interface Circuit Board.

Conclusion

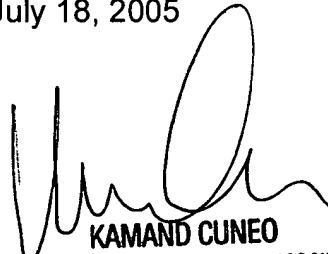
Any inquiry concerning this communication or earlier communications from the examiner should be directed to HUNG T. NGUYEN whose telephone number is 571-272-5983. The examiner can normally be reached on 8:00AM - 5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, KAMMIE CUNEO can be reached on 571-272-1957. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

HN

Hung Thanh Nguyen

July 18, 2005


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